united to form living matter'. But that is an utterly unfounded assertion which begs the whole question at issue. And the only justification for his phrase, 't we have seen that', is his perverse statement cited above concerning the bearing of the history of physiology. As a matter of simple fact almost all biological literature by authors of all schools makes free use of such terms as adaptation, regulation, function, goals, purpose, success, failure.

Of all these conceptions, that of adaptation is the most generally accepted as indispensable. Let us hear on * adaptation ' a general biologist, one who, I think, would claim to be a mechanist, and certainly not a vitalist, Prof. W. E. Ritter. He writes of £ the unique ability of living things, as compared with all other things, to fit themselves into different environments—this ability is known as adaptation. . . . We are fundamentally opposed to the view that adaptation is a useless conception for the description and interpretation of vital activity. It is impossible to describe living beings, with anything approaching to fullness, without constant reference to attributes of them the very existence of which is inseparable from the idea of adaptation.'

Most biologists, and not a few biochemists (like Henderson), would, I think, subscribe to Ritter's assertion that it is not possible to so much as describe in any useful manner biological facts and phenomena without implying adaptation. Let the reader reflect that the Darwinian theory was the product of a sustained effort directed to the goal of explaining the origin of species and their

manifold adaptations to their environments.

Individual Experience and the Fallacy of the Concept

Hogben's chief novelty (in his own view) is what he calls 'the publicist standpoint', which, he tells us, is